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<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	09/807,959	BARTON ET AL.	
	Examiner	Art Unit	
	Chirag G. Shah	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. ☒ This communication is responsive to 12/19/06.
- 2. ☒ The allowed claim(s) is/are 1-25.
- 3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    - 1. ☒ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_  
 Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

- 4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  - 5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

  
**CHIRAG G. SHAH**  
**PRIMARY PATENT EXAMINER**

**Attachment(s)**

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|---|--|
| <ul style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul> | <ul style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ul> |
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### **Reasons For Allowance**

1. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, prior art fails to disclose providing a signal representing the degree of correlation between samples of a received signal which are separated by a period corresponding to the useful part of the symbol, the signal thus providing an output representing for each symbol an interval during which significant correlation is found, the method comprising determining respective degrees of correlation in each of plural sub-intervals within said interval, detecting a sub-interval within which a maximum degree of correlation occurs in combination with other limitations set forth in the respective claim.

Regarding claim 12, prior art fails to disclose a method of generating a synchronization pulse including comparing the magnitude of the calculated error with a predetermined threshold and adjusting the timing of the synchronization pulse when the magnitude of the calculated error in the current timing exceeds the predetermined threshold in combination with other limitations set forth in the respective claim.

Regarding claim 13, prior art fails to disclose adjusting the timing of the synchronization pulse in response to the counted symbol periods exceeding a predetermined number greater than one, wherein the error in the current timing is calculated by comparing a timing signal with a range of values corresponding to a sub-interval, said sub-interval being detected by determining respective degrees of correlation in each of plural sub-intervals within a correlation interval within which significant correlation occurs, and detecting said sub-interval within which a maximum degree of correlation occurs in combination with other limitations set forth in the respective claim.

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Regarding claim 15, prior art fails to disclose a method of generating a synchronization pulse, including changing the timing of the synchronization pulse by a predetermined adjustment quantity, the predetermined adjustment quantity being calculated by a rounding operation in combination with other limitations set forth in the respective claim.

Regarding claims 20 and 24, prior art fails to disclose a method of generating a synchronization pulse, providing, once the timing of the synchronization pulse is altered, a signal representing the degree of alteration to a phase rotation unit; and applying: to the transformed samples received from the FFT phase rotations determined based on the signal in combination with other limitations set forth in the respective claim.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7682. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cgs

February 2, 2007



Chirag G. Shah  
Primary Examiner, 2616

CHIRAG G. SHAH  
PRIMARY PATENT EXAMINER